

Environmental Management Performance Report

March 2002



**Pacific Northwest
National Laboratory**

Operated by Battelle for the
U.S. Department of Energy



Department of Energy
Richland Operations Office

PREPARED FOR THE U.S. DEPARTMENT OF ENERGY, RICHLAND OPERATIONS OFFICE
OFFICE OF ENVIRONMENTAL MANAGEMENT

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Introduction

This document provides the Department of Energy Richland Operations Office (DOE-RL) with a report of the Pacific Northwest National Laboratory (PNNL) performance by Battelle Memorial Institute and its subcontractors.

In Section A, the Executive Summary, text and graphics report the safety metrics status for all PNNL activities. Senior management's overall performance assessment of all Environmental Management activities conducted at PNNL is presented in a stoplight chart.

Section B, Project Performance Summary, provides a brief summary of the month's performance for the PNNL lead activity, PNNL Waste Management (PBS RL-SS01), and is presented in the narrative and Cost / Schedule Performance Stoplight. More detailed information can be found within PNNL-7911-122a, PNNL's Quarterly Project Status Report, for the second quarter of Fiscal Year (FY) 2002. Summary analyses pertaining to PNNL's support to other Project Baseline Summaries (PBSs) are addressed in the contractor's report having lead responsibility for that scope.

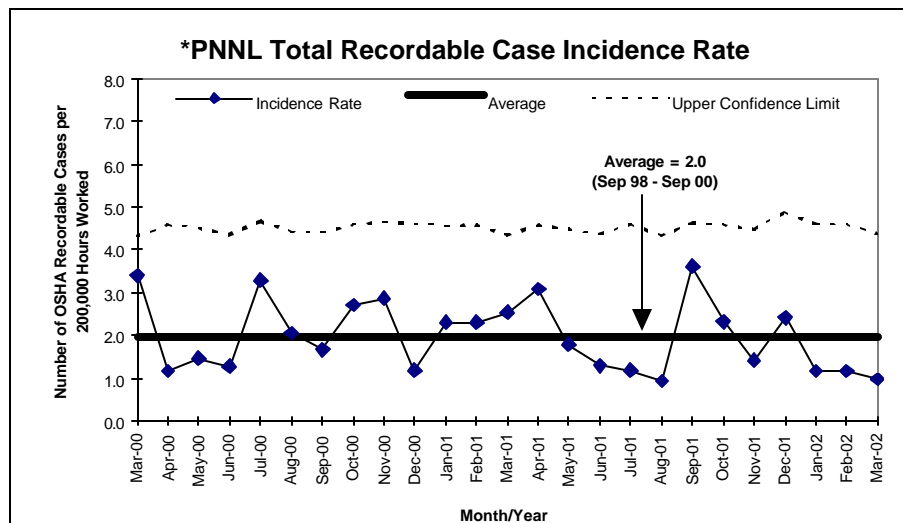
Unless otherwise noted, information in this report is current as of March 31, 2002.

This section provides an executive-level summary of performance information and is intended to bring to management's attention that information considered to be most noteworthy. This section includes an overview of safety performance and assessment spotlight charts.

Safety Overview

The focus of this section is on documenting trends in lab wide work-related injury and illness rates. These are the same performance indicators as appear in the FY 2002 Battelle Performance Evaluation and Fee Agreement, which is part of the PNNL Operations Contract. The monthly rates for Recordable and Lost Workday cases are presented graphically in this section and are monitored for statistically significant changes. Current efforts to improve performance are being made through the implementation of the Integrated Safety Management System (ISMS) and Voluntary Protection Program (VPP).

Total Recordable Case Incidence Rate



FY 2002 Rate Overview:
 Cumulative To Date = 1.5
 Lab Specified Level ≤ 2.2

This indicator has been generally stable over the long term and the data for FY 2002 to date are within the anticipated control limits. The cumulative rate for FY 2002 is currently below the Lab Specified Level.

The following rating reflects the overall assessment of recordable case incidence for PNNL. *(Narrative not required when rating is green.)*

Green

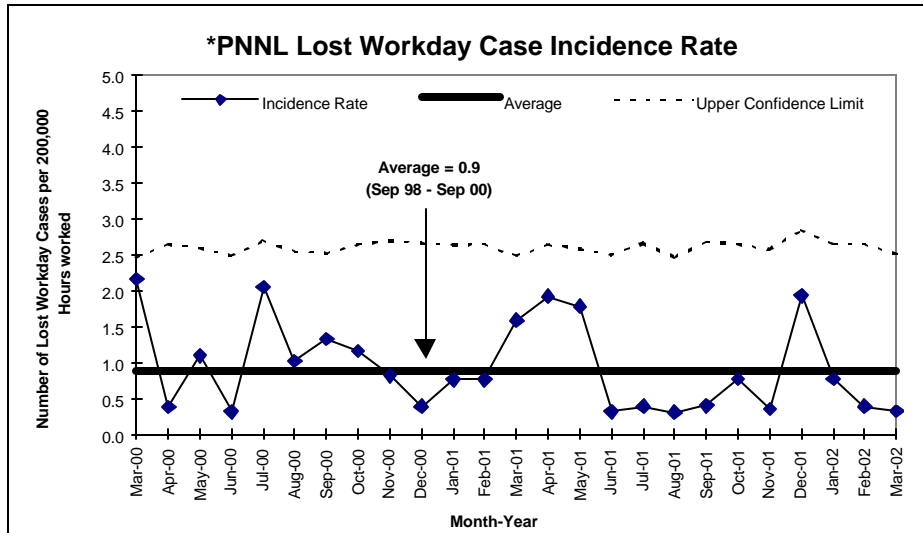
*Includes all PNNL Operations.

Green: Satisfactory

Yellow: Significant improvement required

Red: Unsatisfactory

Lost Workday Case Incidence Rate



FY 2002 Rate Overview:
 Cumulative To Date = 0.7
 Lab Specified Level ≤ 1.1

This indicator has been generally stable over the long term. The data points for FY 2002 to date are within the anticipated control limits. The cumulative rate for FY 2002 is currently below the Lab Specified Level.

The following rating reflects the overall lost workday case incidence for PNNL. (*Narrative not required when rating is green.*)

Green

*Includes all PNNL Operations.

Green: Satisfactory

Yellow: Significant improvement required

Red: Unsatisfactory

This section provides cost and schedule performance, any significant issues, baseline change request information for the period covered, and quarterly status on baseline performance outcomes, objectives, and measures. In FY 2002, Battelle Memorial Institute has lead responsibility over PBS RL-SS01, PNNL Waste Management WBS 3.4.1.7.

Mission

WBS 3.4.1.7 provides PNNL with waste management services and compliant operations in support of science and technology development for the multiprogramming needs of the U.S. Department of Energy (DOE) Complex. These services include:

- Essential surveillance and maintenance of DOE laboratory facilities assigned to PNNL for safe containment of radioactive and hazardous materials
- Infrastructure required to manage wastes and effluents currently generated at the PNNL
- Operational compliance services to meet regulatory requirements and operating permits including environment, safety, and health regulations
- Management of legacy wastes and contamination remaining from past PNNL research operations.

Activity Summary

The following summarizes the activities associated with PNNL Waste Management services and operations conducted during March 2002.

- Scheduled Radiochemical Processing Laboratory (RPL) radiological surveys and nuclear control inspections were performed. Criticality safety inspections and nuclear material holdings in all Material Balance Areas (MBA) were reviewed with MBA Custodians. All criticality safety controlled areas (CSCAs) and exempt areas (EA) were inspected to ensure operations with fissionable material complied with PNNL and RPL requirements. Utility isolation continues on 331-B in preparation for demolition of the building later this year.
- All required radiological air samples during the month of March were collected and confirmed that all results received to date were within historical emission levels. The Environmental Molecular Science Laboratory (EMSL) monthly Discharge Monitoring Report (DMR) for February was submitted directly to the city of Richland on March 6, 2002, thereby satisfying the March deliverable within PNNL Milestone RLSS01F201, "Demonstrate Compliance with Industrial Wastewater Permit Limits for EMSL." The DMR was submitted in accordance with Part III, Section A of Industrial Wastewater Discharge Permit No. CR-IU005. This report covered the period February 1 to February 28, 2002. All measured parameters for wastewater discharged to the Richland publicly owned treatment works were within permit limits. Emissions Data were provided to Fluor Hanford for inclusion into the *Radionuclide Air Emissions Report for the Hanford Site, Calendar Year 2001*, (DOE/RL-2002-20, Rev.) on March 14, 2002, over one month ahead of the project milestone (RLSS01F202) due date.

- During the month of March, 150 National Environmental Policy Act (NEPA) reviews were performed and the Threshold Planning Quantity (TPQ) monthly review of the PNNL's chemical inventory was conducted. The review confirmed that PNNL remains below the TPQ reporting levels for all toxic chemicals. In cooperation with the Radioactive Waste Operations group, the Hazardous and Miscellaneous Waste Operations group neutralized more than 40 gallons of acid waste at the Hazardous Waste Treatment Unit located in the RPL. The unit also bulked four containers of mixed waste with a total of 130 items and shipped eighteen drums (543 kg). The third shipment of high-level RPL shielded waste casks was completed on schedule and without incident at the Hanford Site's Central Waste Complex. Packaging and Transportation staff members supported twenty-five shipments including ten radioactive shipments offsite, three radioactive shipments onsite, and twelve hazardous material shipments onsite and offsite.
- Over thirty legacy waste projects/tasks are scheduled for completion in FY 2002. Staff members are currently working on 24 legacy tasks that have resulted in over 138 disposal requests to date. Work continues in the legacy waste management of over 550 items located in RPL Rooms 517 and 50A. Five legacy waste containers were shipped to meet the final PNNL portion of a U.S. Department of Energy (DOE) milestone performance indicator (TPA Milestone 92-16) four years ahead of schedule. The sale and shipment of 15.7 metric tons of graphite generated during the 318 Legacy Waste project cleanout was completed in March. DOE-RL granted approval to proceed with a negotiated sale of the graphite.

Performance Data and Analysis

As of March 31st, 2002, the cumulative costs are \$6.3M with a positive cost variance of \$.8M and a cumulative schedule variance of negative \$.4M. The cumulative cost variance is 11% and the cumulative schedule variance is a negative 6%.

Cost Performance (\$M):			
	BCWP	ACWP	Variance
PNNL Waste Management	\$7.1	\$6.3	\$.8
Schedule Performance (\$M):			
	BCWP	BCWS	Variance
PNNL Waste Management	\$7.1	\$7.5	(\$.4)

FY 2002 Cost/Schedule Performance - All Fund Types **Cumulative to Date Status - (\$000)**

WBS	PBS	BCWS	BCWP	ACWP	CV	%	SV	%
3.4.1.7	RL-SS01	<u>\$7,537</u>	<u>\$7,089</u>	<u>\$6,285*</u>	<u>\$803</u>	<u>11</u>	<u>(\$448)</u>	<u>-6</u>
Total		<u>\$7,537</u>	<u>\$7,089</u>	<u>\$6,285*</u>	<u>\$803</u>	<u>11</u>	<u>(\$448)</u>	<u>-6</u>

*PNNL has \$1.194M carryover, is expecting \$15.044M new B/A in FY 2002, for a total of \$16.238M. Current new B/A obligated is \$9.263M.

Cost/Schedule Performance Stoplight

The following rating reflects overall cost and schedule performance for PNNL Waste Management activities. *(Narrative not required when rating is green.)*

The cumulative cost variance is largely due to issues within the RPL and Legacy Waste Projects. Programmatic efficiencies and delayed billings attribute to the majority of the variance. The projects expect to complete within the approved budget.

The cumulative schedule variance is within the reporting threshold.

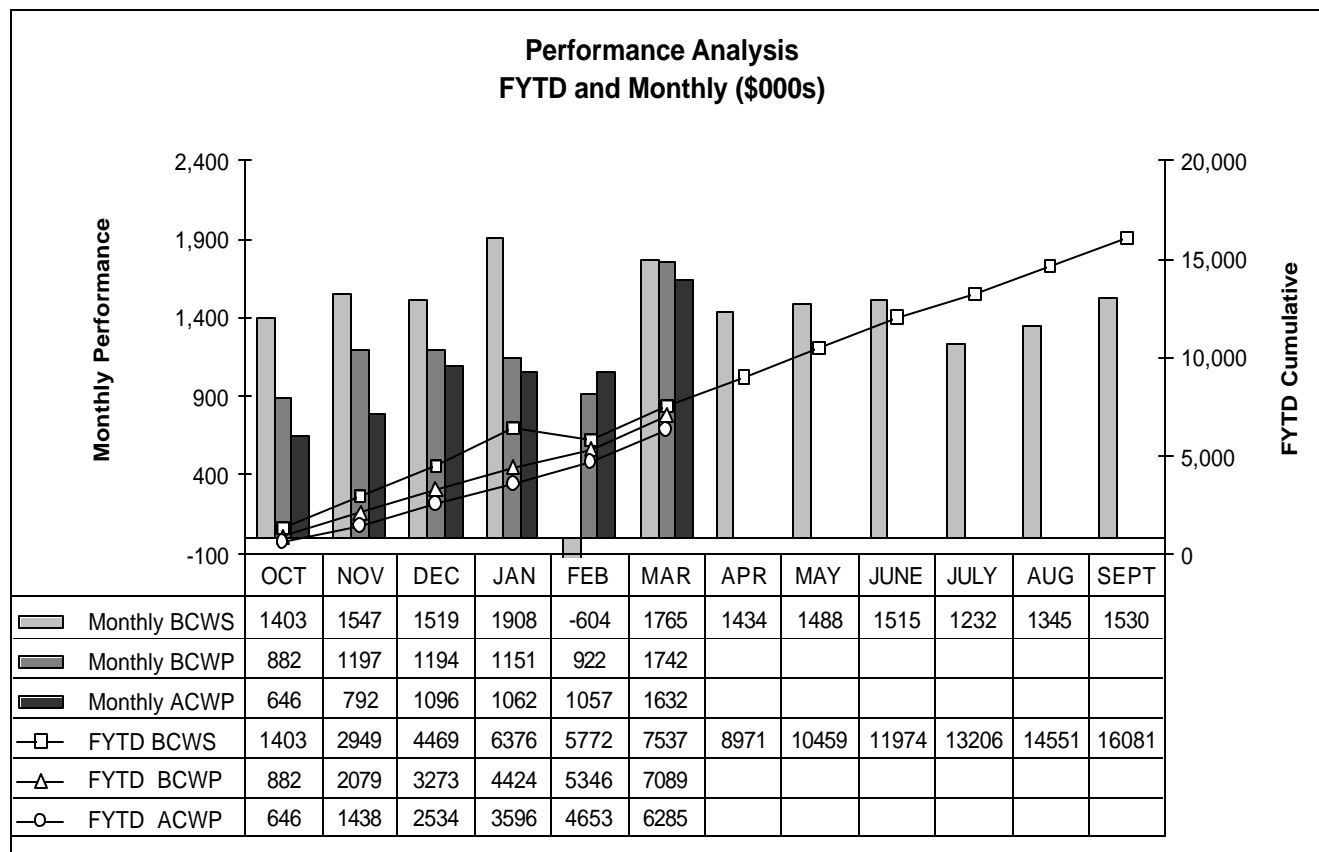
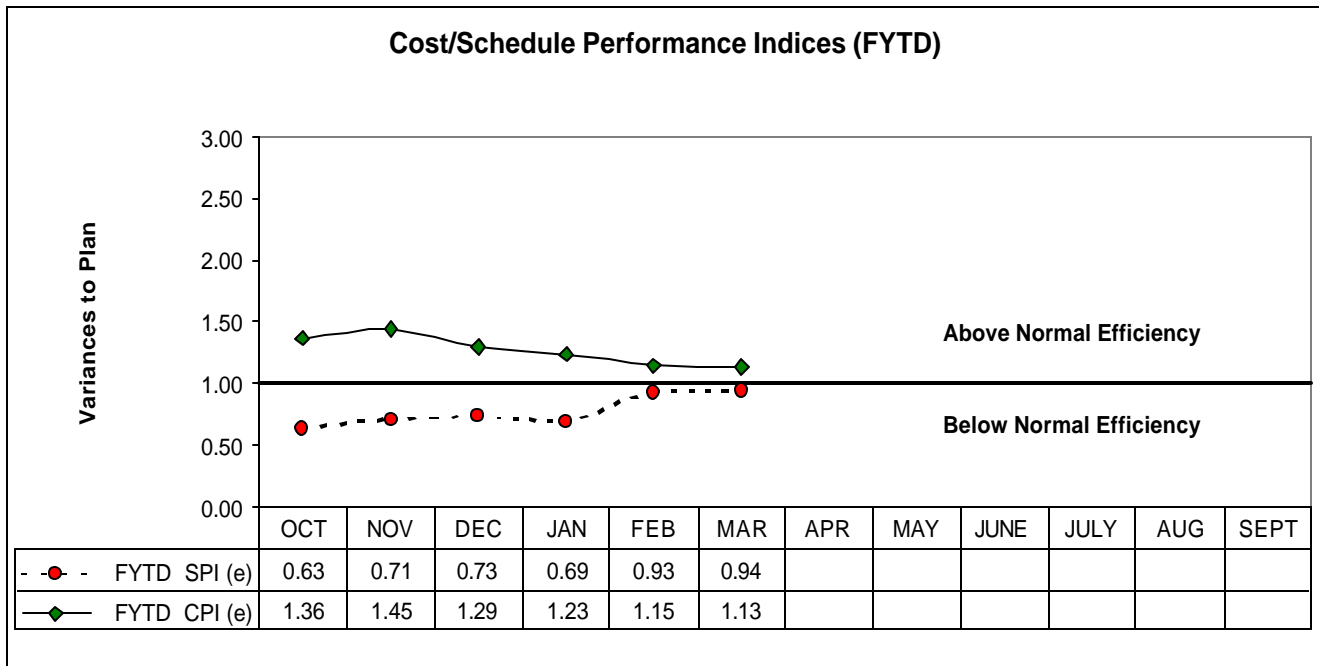
GREEN

Green: Satisfactory

Yellow: Significant improvement required

Red: Unsatisfactory

PNNL Performance Data and Analysis



PNNL Environmental Management Performance Report – March 2002
Section B - Project Performance Summary

RL Objective	RL Multi-Year Performance Measure	Performance Measure	FY02 EM Commitment Y/N	TPA # CMM#	FY 2002
RL Outcome: Put DOE assets to work for the future					
Operational Excellence Status:	Operate in a manner conducive to excellence and quality	Conduct routine operational activities to comply with statutory and regulatory requirements, specifically number of non-compliances related to environmental permit requirements There were no Notice of Violations (NOVs) issued to PNNL during the second quarter of FY-2002. Resulting in a total of zero (NOVs) for the first half of FY-2002	No		<2
Operational Excellence Status:	Operate in a manner conducive to excellence and quality	Maintain fiscal year end cost and schedule variances within established thresholds The WMOC Program cost variance for the second quarter is \$62K (2%) and is within the established threshold. The schedule variance is \$747K (24%). This is due primarily to implementation of the reprice BCR in February.	No		+/- 10%
Safety Status:	Protect workers, the public and the environment	Initiate appropriate response to any unsafe condition identified during surveillance and maintenance of EM facilities assigned to PNNL within x days of discovery (as shown to the right) To date surveillances have not identified any unsafe conditions in shutdown facilities. Only minor maintenance items have been noted and they have been appropriately addressed with service requests. No unsafe conditions have been discovered in RPL that have resulted in an appropriate response initiation greater than one day. Any unsafe condition discovered in RPL is addressed immediately.	No		1
Safety Status:	Protect workers, the public and the environment	Quantity of HAZ waste (MT) shipped for storage or disposal During the second quarter of FY 2002, 4,824 Kgs. of non-radioactive hazardous wastes were shipped. A total of 10,824	No		25,000 kg/FY

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RL Objective	RL Multi-Year Performance Measure	Performance Measure	FY02 EM Commitment Y/N	TPA # CMM#	FY 2002
		Kgs. have been shipped for offsite treatment and disposal this fiscal year. This is in line with expected generation rates for FY 2002.			
RL Outcome: Put DOE assets to work for the future					
Safety Status:	Protect workers, the public and the environment	Quantity of RMW (m ³) shipped for storage or disposal. During the second quarter of FY 2002, 3.12 cubic meters of RMW (Mixed Waste) were shipped for a total of 3.12 cubic meters for the fiscal year.	No		25
Safety Status:	Protect workers, the public and the environment	Quantity of LLW (m ³) shipped for storage or disposal During the second quarter of FY 2002, 7.12 cubic meters of LLW (Low Level Waste) were shipped for a total of 14.224 cubic meters for the fiscal year.	No		125
Safety Status:	Protect workers, the public and the environment	Quantity of TRU waste (m3) shipped for storage or disposal During the second quarter of FY 2002, 0.2 cubic meters of TRU (Transuranic waste) was shipped for a total of 9.408 cubic meters for the fiscal year.	No		8
Safety Status:	Protect workers, the public and the environment	Radiochemical Processing Lab (RPL) Authorization Basis maintained current per scheduled milestone Currently no safety issues exist in the RPL. As issues are identified, they are immediately addressed and mitigated.	No	RLSS01R204	7/31/02
RL Outcome: Restore the river corridor for multiple uses					
Waste Disposal Status:	Dispose of Legacy Waste	Percent completion of annually scheduled legacy waste projects. During the second quarter of FY 2002, 20% of the annually scheduled legacy waste projects have been completed for a total of 47.92% for the fiscal year.	No		>90%
Waste Disposal Status:	Disposal of Special Case Waste	Support timely completion of TPA M-92-14: Complete disposition of PNNL Special Case Waste. The waste was shipped in March 28,	No	RLSS01L211	03/30/02 Complete

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Section B - Project Performance Summary

RL Objective	RL Multi-Year Performance Measure	Performance Measure	FY02 EM Commitment Y/N	TPA # CMM#	FY 2002
		2002. Completing this performance outcome.			
Reduce risks to the Columbia River from ground water contamination Status:	Number of soil sites addressed	Percentage of Waste Identification Data System sites characterized and associated surveillance/maintenance established. All waste sites have basic characterization data and identified S&M is being accomplished.	No		100%